

CLAIMS

What is claimed is:

- 5 1.A miniature motor structure, comprising :
a stator, further comprising :
a first coil seat, including a first bottom plate, a
plurality of first outer teeth, a plurality of first inner
teeth ;
10 a coil, formed in the first coil seat ;
a second coil seat, including a second bottom plate, a
plurality of second outer teeth, a plurality of second
inner teeth, said second coil seat formed on the first coil
seat, each of said second outer teeth interposed between
15 said adjacent first outer teeth, each of said second inner
teeth interposed between said adjacent first inner teeth ;
a circular magnet, surrounding said stator ; and
a shift, coupled to said stator.
- 20 2.The miniature motor structure according to claim 1,
wherein said first bottom plate further includes a first
central opening, said first outer teeth protruding form said
first bottom plate and surrounding an outer periphery of
said first bottom plate, said first inner teeth protruding
25 form said first bottom plate and surrounding said first
central opening.
- 30 3.The miniature motor structure according to claim 1,
wherein said second bottom plate further includes a second
central opening, said second outer teeth protruding form

said second bottom plate and surrounding an outer periphery of said second bottom plate, said second inner teeth protruding from said second bottom plate and surrounding said second central opening.

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4.The miniature motor structure according to claim 1, further comprises a metal housing surrounding said circular magnet and used to avoid magnetic leakage.

10 5.The miniature motor structure according to claim 1, wherein said first coil seat and said second coil seat are made of silicon steel.

15 6.The miniature motor structure according to claim 1, wherein said coil is positioned in a space defined by said first coil seat and said second coil seat.

20 7.The miniature motor structure according to claim 1, wherein said coil is preformed.

8.The miniature motor structure according to claim 1, wherein said coil is wound around a post consisting of said first coil seat and said second coil seat.

25 9.The miniature motor structure according to claim 1, wherein said first inner teeth and said second inner teeth further comprise a cut corner.

30 10.The miniature motor structure according to claim 1, wherein said first inner teeth and said second inner teeth

further comprise an arc.

11. The miniature motor structure according to claim 1,
wherein said first inner teeth and said second inner teeth
5 further comprise a gap.

12. A miniature motor structure, comprising :
a stator, further comprising :

10 a first coil seat, including a first bottom plate, a
plurality of first outer teeth, a plurality of first inner
teeth, said first bottom plate further including a first
central opening, said first outer teeth protruding from
said first bottom plate and surrounding an outer
15 periphery of said first bottom plate, said first inner teeth
protruding from said first bottom plate and surrounding
said first central opening ;

a coil, formed in the first coil seat ;

20 a second coil seat, including a second bottom plate, a
plurality of second outer teeth, a plurality of second
inner teeth, said second coil seat formed on the first coil
seat, said second bottom plate further including a
second central opening, said second outer teeth
25 protruding from said second bottom plate and
surrounding an outer periphery of said second bottom
plate, said second inner teeth protruding from said
second bottom plate and surrounding said second
central opening, each of said second outer teeth
30 interposed between said adjacent first outer teeth, each
of said second inner teeth interposed between said
adjacent first inner teeth ;

a circular magnet, surrounding said stator ;
a metal housing, surrounding said circular magnet ; and
a shift, coupled to said stator.

5 13.The miniature motor structure according to claim 12,
wherein said first coil seat is identical to said second coil
seat.

10 14.The miniature motor structure according to claim 12,
wherein said first coil seat and said second coil seat are
made of silicon steel.

15 15.The miniature motor structure according to claim 12,
wherein said coil is positioned in a space defined by said
first coil seat and said second coil seat.

16.The miniature motor structure according to claim 12,
wherein said coil is preformed.

20 17.The miniature motor structure according to claim 12,
wherein said coil is wound around a post consisting of
said first coil seat and said second coil seat.

25 18.The miniature motor structure according to claim 12,
wherein said first inner teeth and said second inner teeth
further comprise a cut corner.

30 19.The miniature motor structure according to claim 1,
wherein said first inner teeth and said second inner teeth
further comprise an arc.

20.The miniature motor structure according to claim 1,
wherein said first inner teeth and said second inner teeth
further comprise a gap.

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